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(54) METHOD FOR SYNTHESIZING DIAMOND

(57)Abstract:

PURPOSE: To remove nitrogen which makes diamond crystals yellowish from a solvent by adding Al, Ti or Zr to the solvent when seed diamond crystals are put in a region in which diamond is stably grown by a temp. difference method in the case of diamond synthesis with the seed crystals as nuclei by diffusing carbon from a carbon source fed through the solvent and to inhibit the intrusion of carbide and nitride into diamond crystals, since the deterioration of the quality of synthesized diamond due to the intrusion is occurred in the case when Ti or Zr is added.

CONSTITUTION: An element forming nitride and carbide at the same time is added as a nitrogen getter to a solvent. The element has lower viscosity than the solvent. Nitride and carbide formed before the growth of diamond crystals are allowed to float or settle.

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